IN THE UNITED STATES DISTRICT COURT

FOR THE NORTHERN DISTRICT OF OKLAHOMA

STATE OF OKLAHOMA, ex rel, W.A. DREW EDMONDSON, in his capacity as ATTORNEY GENERAL OF THE STATE OF OKLAHOMA, et al.	)	
Plaintiffs,	)	
V.	)	No. 05-CV-329-GKF-SAJ
TYSON FOODS, INC., et al.,	)	
Defendants.	)	

REPORTER'S TRANSCRIPT OF PROCEEDINGS

FEBRUARY 22, 2008

PRELIMINARY INJUNCTION HEARING

VOLUME IV

BEFORE THE HONORABLE GREGORY K. FRIZZELL, Judge

APPEARANCES:

For the Plaintiffs: Mr. Drew Edmondson
Attorney General
Mr. Robert Nance
Mr. Daniel Lennington
Ms. Kelly Hunter Burch
Mr. Trevor Hammons
Assistant Attorneys General
313 N.E. 21st Street
Oklahoma City, Oklahoma 73105

Glen R. Dorrough
UNITED STATES COURT REPORTER

PLAINTIFF'S EXHIBIT D

MR. GEORGE: Let's go to 466.

THE COURT: Thank you.

MR. GEORGE: Thank you, Mr. Page.

Q. (By Mr. George) Do you recognize State's Demonstrative Exhibit 466, Dr. Olsen?

A. Yes, I do.

Q. If I understand your testimony on direct examination, these are the percentages in the samples that you used in the principal component analysis where you believe you have detected the chemical signature for poultry; is that correct?

A. One clarification on this. This is by location, not by samples.

Q. Okay. So Dr. Olsen, with respect to the edge of field samples 100 percent, and the groundwater samples 60 percent, those percentages do not include the 2,000 samples that were excluded from your principal component analysis; is that right?

A. They only include the samples that have enough parameters to do the principal component analysis.

Q. I believe you testified yesterday that was about 620; correct?

A. 621, yes, for this set.

Q. So the remaining samples, approximately 2,000, you could not find enough of the parameters on your list in those samples to make them useful in the PCA analysis; is that correct?

A. Well, most of those samples, a lot of those samples are

not water samples. So the poultry waste, the soils, the sediment you have to take out right away. And the others were designed for a less set of parameters. We did not analyze all those samples for the extended list of parameters. So there's a reduced list here that we can use and that number is approximately 621.

Q. Dr. Olsen, if we factored back in the 2,000 samples where you didn't even have enough of your parameters to run the PCA, what would your percentages on this chart look like?

A. You couldn't do the analysis, sir. You have to -- the PCA blows up or doesn't work when you have holes in it. That's why we have to select the list that we do and make some rules.

Q. Well, sir, if a given sample does not even have enough of the parameters to allow the PCA to analyze it, isn't that an indication that the chemical signature that you believe you've identified from poultry is not in that sample?

A. No, that's not correct at all. You misunderstand what we are doing here.

Q. You think that on the samples where you don't even have, for example, phosphorus and aluminum detected, that even though those are components of your signature, that the chemical signature still might be present in those samples?

A. Yes, if we had analyzed the complete suite of parameters, we would have had much -- a lot of those -- about the same percentages, I would say, of all those samples would have had

the chemical signature. It's just that some of those samples were not analyzed for the complete list.

Q. Why not?

A. Well, one of the reasons is that we were trying to -- remember yesterday I described setting up stratified sampling designs. And one of the things I talked about was collecting over 200 samples just for indicator parameters like phosphorus and nitrogen. And from that set, then we did a stratified design and picked a subset of samples where we could do all the analysis. So the analysis that we did for the complete analysis were set up on a -- surface water were set up on the stratified random designs that I collected yesterday. It's just impossible cost-wise to actually analyze for that many parameters and that many samples. So we created a scheme where we had a representative set where we analyzed for all the parameters.

Q. Dr. Olsen, let me refer you to State's Demonstrative Exhibit 459 which is a chart that you prepared. You'll recognize it when it comes on the screen, I suspect. Do you recognize that chart, sir?

A. Yes, I do.

Q. You prepared that; correct?

A. Yes, I did.

Q. And if I understand it, the point of this chart is you're comparing concentrations in poultry litter of various

Q. A specific farm under contract with one of the defendants.
A. No, I've not been asked to do that.
Q. Does it allow you to identify a specific defendant?
A. No, I've not been asked to do that.
Q. Going to Demonstrative Exhibit 461, State's Demonstrative Exhibit 461. Dr. Olsen, you prepared this map; correct?
A. That's correct.
Q. And I didn't quite follow this, so I want to discuss it with you. In your direct examination, there was some attention drawn to the green dots outside of the Illinois River Watershed.
A. Yes, sir.
Q. Do you recall that?
A. Yes, sir.
Q. And I think you described those as control areas; is that right?
A. There's three green dots. There's one right above the basin, that's Spring Creek. And there's two below the basin, far below the basin, not that far, kind of on the county line there that are Little Lee Creek. And there's a green dot that can't be shown here because it's Dry Creek, it's in the Buffalo Creek area. Those are the reference areas for surface waters. Those other three happen to be springs that were collected. I didn't really associate those were reference areas. Again, they were just trying to collect all the springs. So those are

the kind of three little dots there too. So there's those primary unimpacted areas is the right word for those, unimpacted with poultry waste.

Q. Okay. And Dr. Olsen, what was the purpose of collecting samples there and applying your chemical signature analysis to them?

A. Well, we always need a comparison. So we have to do some complete analysis on unimpacted areas too, so we know what unimpacted areas look like too. So we selected these three areas outside the basin. We also tried to find areas within the basin and found at least two that were minimally impacted and I used those as references too within the basin.

Q. Let's go to your affidavit. Pull up his affidavit.

MR. GEORGE: Your Honor, may I approach the witness?

THE COURT: Yes, sir.

Q. (By Mr. George) Dr. Olsen, I'm going to come stand by you for just a moment. Do you recognize this affidavit which was attached as Exhibit 15 to the State's preliminary injunction motion?

A. Yes.

Q. And if we can turn to paragraph, I think it's 9 in your affidavit, can you read the very last sentence, please?

A. "This signature is not present in samples collected from streams and rivers in an area where -- with no poultry waste disposal."